

ADVANCES IN MATHEMATICS 73, 147–148 (1989)

Book Reviews

K. WEIHRAUCH, *Computability*, Springer, 1987, 517 pp.

Unless you are a specialist in recursion theory (in which case you do not need to read textbooks in recursion theory) this book makes a better introduction than sundry other books written by mathematicians for mathematicians. When there is a product at the other end, as there is for the computer scientists, the exposition has to be made clear by ineluctable *nécessité d'affaires*.

M. L. EATON, *Lectures on Topics in Probability Inequalities*, Centre for Mathematics and Computer Science, 1980, 197 pp.

What do you know? Another book on majorization. We thought we had just finished reviewing one. But books on majorization will never be too many, ever since Muirhead (yes, it was Muirhead, not Hardy, Littlewood, and Pólya as is commonly supposed) introduced the concept. This one is more ambitious: it attempts to break out of R^1 into R^n , and not unsuccessfully at that.

Z. W. PYLYSHYIN, *Computation and Cognition*, MIT Press, 1984, 292 pp.

Trying to infer the working of the brain from its neuronal structure (whether real or simulated) is like trying to infer the working of the Federal Government by examining the structure of buildings in Washington. Surely there is something amiss here, we will wait for some philosopher to find out what. (There are so many looking for a job!)

G. M. D'ARIANO, A. MONTORSI, AND M. G. RASETTI (Eds.), *Integrable Systems in Statistical Mechanics*, World Scientific, 1985, 169 pp.

The trend towards unification in mathematics (which proceeds parallel to the trend towards compartmentalization) is clearest in what used to be the formal theory of ordinary differential equations (that is, in the times of Burchnall and Chaundy, who in their heyday were almost laughed out of Oxford and are now being promoted to the status of demi-gods) and is now the theory of integrable systems (after a brief parenthesis when it used to be called soliton-theory). Even matroids creep into the picture, though the authors of this book do not seem to realize the fact, bent as they are on quoting no other mathematician than the late Richard Bellman.